



Docket No.: C0875.70021US00

(PATENT)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Martha M. Murray et al.

Serial No.:

09/917,058

Confirmation No.:

2028

Filed:

July 27, 2001 6,964,685

Patent No.: For:

BIOLOGIC REPLACEMENT FOR FIBRIN CLOT

Examiner:

B. E. Pellegrino

Art Unit:

3738

Certificate of Mailing Under 37 CFR 1.8(a)

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as First Class Mail, in an envelope addressed to: Attention: Certificate of Correction Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Dated: June 14, 2007

Marie A. Aucoin, Ph.D., Registration No. 59,414

### TRANSMITTAL LETTER

Attention: Certificate of Correction Branch Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

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Certificate

JUN 2 1 2007

of Correction

Dear Sir:

Enclosed are the following items for filing in connection with the above-referenced Patent:

- 1. Request for Certificate of Correction (No Fee)
- 2. Certificate of Correction
- 3. Copy of Filing dated 2/23/05
- 4. Copy of USPTO Communication mailed 6/1/05

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 23/2825, under Docket No. C0875.70021US00. A duplicate copy of this paper is enclosed.

Dated: June 14, 2007

Respectfully submitted,

Marie A. Aucoin, Ph.D. Registration No.: 59,414

WOLF, GREENFIELD & SACKS, P.C.

Federal Reserve Plaza 600 Atlantic Avenue

Boston, Massachusetts 02210-2206

(617) 646-8000



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Dated: June 14, 2007

Marie A. Aucoin, Ph.D., Registration No. 59,414

# REQUEST FOR CERTIFICATE OF CORRECTION PURSUANT TO 37 CFR §1.322

Attention: Certificate of Correction Branch

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Dear Sir:

Upon reviewing the above-identified patent, Patentee noted an omission by the United States Patent and Trademark Office (USPTO) and typographical errors, which should be corrected.

In the Specification:

At page 1, line 5, directly following the title, Applicant requested in an Amendment After Notice of Allowance Under 37 CFR §1.312(a) dated February 23, 2005 (copy enclosed), that the USPTO insert the following paragraph into the specification:

This invention was made in part with Government support under NIH Grant No. R03 AR46356. Accordingly, the Government may have certain rights in this invention.

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JUN 2 1 2007

A Notice was mailed by the USPTO dated June 1, 2005, indicating that the Amendment filed on February 23, 2005 under 37 CFR §1.312(a) had been considered and entered as directed to matters of form not affecting the scope of the invention (copy enclosed).

# In the Specification:

Column 1, line 41, "J. Bone" should be "J. Bone Joint Surg. 373-383"

Column 5, line 14, "explained" should be "explanted"

Column 3, line 11, "memscus" should be "meniscus"

Column 9, line 41, "Tones" should be "Torres"

Column 12, line 5, "DMEMIF" should be "DMEM/F"

Column 13, line 54, "Coming" should be "Corning"

Column 16, line 43, "ledge" should be "edge"

Column 20, line 10, "10 mm" should be "10 min"

Column 35, line 20, "Coming" should be "Corning"

Column 45, line 52, "glycosaminoglican" should be "glycosaminoglycan"

Column 47, line 37, "(t)" should be "(f)"

Column 50, line 18, "cosin" should be "eosin"

Column 54, line 47, "psPT-19" should be "pSPT-19"

Column 61, line 20, "(GEC)" should be "(GFC)"

The omission and errors were not made by the Applicant and accordingly no fee is required. Transmitted herewith is a proposed Certificate of Correction effecting such amendment. Patentee respectfully solicits the granting of the requested Certificate of Correction.

Dated: June 14, 2007

Respectfully submitted,

Marie A. Aucoin, Ph.D.

Registration No.: 59,414

WOLF, GREENFIELD & SACKS, P.C.

Federal Reserve Plaza

600 Atlantic Avenue

Boston, Massachusetts 02210-2206

(617) 646-8000

# UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page \_1\_ of \_1\_

PATENT NO.

6,964,685

APPLICATION NO.

09/917.058

**ISSUE DATE** 

November 15, 2005

INVENTOR(S)

Martha M. Murray et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

After column 1, line 3 the following paragraph should be inserted:

This invention was made in part with Government support under NIH Grant No. R03 AR46356.

Accordingly, the Government may have certain rights in this invention.

Column 1, line 41, "J. Bone" should be "J. Bone Joint Surg. 373-383"

Column 5, line 14, "explained" should be "explanted"

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I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as First Class Mail, in an envelope addressed to: Attention: Certificate of Correction Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Dated: June 14, 2007

Signature: WWW HILL

(Marie A. Aucoin, Ph.D., Registration No. 59,414)

MAILING ADDRESS OF SENDER (Please do not use customer number below):
Marie A. Aucoin, Ph.D.
WOLF, GREENFIELD & SACKS, P.C.
Federal Reserve Plaza
600 Atlantic Avenue
Boston, Massachusetts 02210-2206

JUN 2 1 2007



**DOCKET NO: B0801.70258US00** 

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Martha M. Murray et al.

Serial No:

09/917,058

Confirmation No:

2028

Filed:

July 27, 2001

For:

BIOLOGIC REPLACEMENT FOR FIBRIN CLOT

Examiner:

Brian E. Pellegrino

Art Unit:

3738

#### **CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)**

The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to Mail Stop Issue Fee, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the 23<sup>rd</sup> day of February, 2005.

Helen C. Lockhart

Mail Stop Issue Fee Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Transmitted herewith are the following documents:

[X] Amendment after Notice of Allowance Under 37 C.F.R. 1.312(a)

[X] Return Receipt Postcard

If the enclosed papers are considered incomplete, the Mail Room and/or the Application Branch is respectfully requested to contact the undersigned at (617) 646-8000, Boston, Massachusetts.

No check is enclosed. If a fee is determined to be required, the balance may be charged to the account of the undersigned, Deposit Account No. 23/2825. A duplicate of this sheet is enclosed.

Respectfully submitted,

Martha M. Murray, Applicant

By:

Helen C. Lockhart, Reg. No. 39,248

Wolf, Greenfield & Sacks, P.C.

600 Atlantic Avenue

Boston, Massachusetts 02210-2211

Telephone: (617) 646-8000

Docket No. B0801.70258US00 Date:February 23, 2005 xNDDx

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JUN 2 0 2007

DOCKET NO: B0801.70258US00

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Examiner:

Brian E. Pellegrino

Art Unit:

3738

#### **CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)**

The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to Mail Stop Issue Fee, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the 23<sup>rd</sup> day of February, 2005.

Helen C. Lockhart

Mail Stop Issue Fee Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

# AMENDMENT AFTER NOTICE OF ALLOWANCE UNDER 37 C.F.R. § 1.312(a)

Sir:

This is responsive to a Notice of Allowance dated December 29, 2004. Please amend the application as follows.

Amendments to the Specification are reflected in the listing that begins on page 2 of this amendment.

Remarks begin on page 4 of this amendment.

#### In the Specification

Applicants present replacement paragraphs and/or lines with insertions indicated by underlining and deletions indicated by strikethroughs or double bracketing. Insertions in text that is already underlined in the filed specification are indicated by double underlining.

Please add the following new paragraph after the Title and immediately before the paragraph beginning on page 1, line 5:

#### FEDERALLY SPONSORED RESEARCH

This invention was made in part with Government support under NIH Grant No. R03 AR46356. Accordingly, the Government may have certain rights in this invention.

Please amend the three paragraphs beginning on page 7, line 31 as follows:

Fig. 29: is a photomicrographs of the collagen gel with human ACL cells. d

Fig. 30: is a photomicrograph of the FGF-2 gel at 1 mm from the explanted ACL tissue

Fig. 31:- is a histogram demonstrating the effect of "growth factor cocktail" (GFC) concentration on retention of DNA in the ACL cell seeded gels after three weeks in culture.

Please amend the paragraph beginning on page 92, line 14 as follows:

The number of cells in the gel increased with time in culture. By 9 days of culture, the gel constructs had a histologic appearance similar to that of the intact human ACL in terms of cell density and alignment (Figure 2921). The acid-soluble collagen hydrogel with FGF-2 is conducive to human ACL cell growth and proliferation.

Please amend the paragraph beginning on page 92, line 28 as follows:

The histologic analysis demonstrated increasing numbers of cells in both the cell gel and the cell free gel (Figure 3027). The increase in the cell-seeded gel may have been due to the proliferation of the seeded cells, or to the migration of cells from the tissue into the gel. The initial increase in the cell-free gel was from migration of cells from the ligament tissue. By day 21, the cell density in the two groups was similar. ACL cells will migrate from the tissue into an

adjacent collagen gel with containing FGF-2, resulting in similar cell number densities to a cell-seeded gel by three weeks of culture.

Please amend the paragraph beginning on page 93, line 22 as follows:

The gel with 15% GFC added had the greatest retention of cells at three weeks (one factor ANOVA, p = 0.05; Fisher's PLSD with significant differences between groups 1 and 2; Figure 3129), suggesting this percentage of GFC is optimal for cell retention and support in the gel. Rates of collagen synthesis were also highest in this group at 2 and 3 weeks of culture. The addition of 15% by volume of the "growth factor cocktail" significantly increased the DNA retention in the gel and also resulted in increased rates of collagen synthesis in the gel.

#### **REMARKS**

Claims 19-21 and 40-42 were allowed. Amendments are made in the specification to make the figure citations in the Examples section correspond to the figures and to add a listing of Government Funding to the application. No new matter is introduced.

Applicant discovered in the process of having formal drawings prepared that 2 figures are repeated and labeled by two different numbers each. Figure 21 is repeated as Figure 29 and Figure 27 is repeated as Figure 30. In order to remove this duplicate presentation of figures, applicants have deleted original figures 29 and 30 and renumbered Figure 31 as Figure 29. In order to render the specification consistent with the drawings, Applicants have made the above-identified changes to the specification.

Applicants have also discovered that the 1449 filed with the Information Disclosure Statement that was deposited with the Patent Office on June 4, 2004 has not been initialed and returned by the examiner. Applicants respectfully request that the Examiner consider the information disclosure statement and return to applicant an initialed copy of the 1449.

This amendment is filed after mailing of a Notice of Allowance and prior to payment of the issue fee. No petition or fee is required under 37 C.F.R. § 1.312(a).

Applicant solicits the favor of a recommendation by the primary examiner and approval by the Commissioner, to enter the amendment above.

Respectfully submitted,

Martha M. Murray, Applicant

Bv:

Helen C. Lockhart, Reg. No. 39,248

Wolf, Greenfield & Sacks, P.C.

600 Atlantic Avenue

Boston, Massachusetts 02210-2211

Telephone: (617) 646-8000

Docket No. B0801.70258US00 Date: February 23, 2005

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# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/917,058	07/27/2001	Martha M. Murray	18989-001 CIP (BWH-1CIP)	2028
23628 7:	590 06/01/2005		EXAMINER	
WOLF GREENFIELD & SACKS, PC			PELLEGRINO, BRIAN E	
FEDERAL RE	SERVE PLAZA			
600 ATLANTI	C AVENUE		ART UNIT	PAPER NUMBER
BOSTON, MA			3738	
	•		DATE MAIL ED: 06/01/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

			~~~				
	Application No.	Applicant(s)					
Description 242 Communication	09/917,058	MURRAY ET AL.					
Response to Rule 312 Communication	Examiner	Art Unit					
	Brian E Pellegrino	3738					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address –							
<ol> <li>The amendment filed on 25 February 2005 under 37 CFR 1.312 has been considered, and has been:</li> <li>a) ☐ entered.</li> </ol>							
b)  entered as directed to matters of form not affecting the scope of the invention.							
c) disapproved because the amendment was filed after the payment of the issue fee. Any amendment filed after the date the issue fee is paid must be accompanied by a petition under 37 CFR 1.313(c)(1) and the required fee to withdraw the application from issue.							
d) disapproved. See explanation below.							
e) 🔲 entered in part. See explanation below.							
The formal drawings submitted on 3/2/05 have been appr	oved.						
RRIAN E PELLEGRINO	•						

BRIAN E. PELLEGHING PRIMARY EXAMINER Brian & Pellegrin

U.S. Pelent and Trademark Office PTOL-271 (Rev. 04-01)